

***Detailed Action***

Claims 12-17, 20-21, 24-29, 33-49 are pending in this application. Claims 1-11, 18-19, 22-23, 30-32 have been cancelled. This is a response to the Amendments/Remarks filed on 7/21/08. This action is made **FINAL**.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-17, 20-21, 24-29, 33,35-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,498,656 issued to Mastie in view of US Publication 2002/0001495 issued to Mochizuki in further view of US Patent 5,684,931 issued to Hagar.

As per claims 12, 28,40, Mastie teaches a system that includes client computer devices connected to a printing device via a network, a method for managing a print job without use of a print server(Abstract), the method comprising:

a network(Abstract, Fig.5, col.1, lines 38-65);

a printing device connected to the network(Abstract, Fig.5, col.1, lines 38-65);

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a local print queue local to the individual client computer corresponding to the printing device and containing print jobs generated by the individual client computers(Abstract, Fig.5, col.1, lines 38-65);

initiating a print job at a first client computer, wherein the first client computer is one of the client computer connected to the printing device via the network, and wherein no print server is connected to the network(Abstract, Fig.5, col.1, lines 38-65);

distributively managing the print job and a prioritization of the print job until print of the first client computer sends the print job to the printing device, wherein the distributively managing the print job and a prioritization of the print job(col.2, lines 34-65); and sending the print job from the first client computer device to the printing device after an event(col.2, line 64-col.3, line 25) .

Mastie however does not explicitly teach broadcasting an intent to send the print job from the first client computer to the printing device, wherein the intent is broadcast from the first client computer to a plurality of the client computers connected to the printing device via the network without including the print job in the broadcast intent; determining whether a response is received by the first client computer from one or more of the plurality of the client computers; receiving no response at the first client computer; and receiving a response at the first client computer from at least one of the plurality of the client computers, followed by receiving a permission to send the print job to the printing device at the first client computer from the at least one of the plurality of the client computers; a response from a second client computer indicating that the second

client computer is managing sending of print jobs to the printing device, wherein the response includes one of: an indication that the second client computer has no objection to the first client computer sending the first print job to the printing device; an objection to and denial of the immediate sending of the first print job to the printing device by the first client computer; and an indication that a conflict must be resolved in order to permit the first client computer to send the first print job to the printing device.

Mochizuki teaches broadcasting an intent to send the print job from the first client computer to the printing device, wherein the intent is broadcast from the first client computer to a plurality of the client computers connected to the printing device via the network without including the print job in the broadcast intent(para 0041, broadcast or multicast printer retrieval packet to retrieval an active printer from the network);

determining whether a response is received by the first client computer from one or more of the plurality of the client computers(para.0043);

receiving no response at the first client computer (para.0043); and receiving a response at the first client computer from at least one of the plurality of the client computers, followed by receiving a permission to send the print job to the printing device at the first client computer from the at least one of the plurality of the client computers(para.0043).

a response from a second client computer indicating that the second client computer is managing sending of print jobs to the printing device, wherein the response includes one of: an indication that the second client computer has no

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objection to the first client computer sending the first print job to the printing device; an objection to and denial of the immediate sending of the first print job to the printing device by the first client computer; and an indication that a conflict must be resolved in order to permit the first client computer to send the first print job to the printing device(para0041-0043)

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mastie to explicitly broadcast an intent to other network devices and to receive responses from those network devices as taught by Mochizuki in order to provide a system to select an available printer on the network for a print job(Mochizuki, para.0002,0006).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mastie and Mochizuki in order to provide a system to effectively manage and operate print requests(Mochizuki, para.0006).

Mastie in view of Mochizuki teaches all the limitations of claims 12, 28,40, however does not teach explicitly teach using client computers but instead uses printers in order to perform all the processes.

Hager teaches a printer with a processor, memory, input device, output device, and display(Fig.2). One ordinary skill in the art would be able modify the teachings and use a computer instead of a printer since the printer has all the functions of a computer.

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Mastie in view of Mochizuki to use computers instead of printers as taught by Hager in order to provide a

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system to select an available printer on the network for a print job(Mochizuki, para.0002,0006).

One ordinary skill in the art would have been motivated to combine the teachings of Mastie, Mochizuki, Hager in order to provide a system to select an available printer on the network for a print job(Mochizuki, para.0002,0006).

As per claim 13, wherein the step for initiating includes the step for determining whether to perform cluster printing, and wherein if the cluster printing is to be performed, utilizing the printing device in performing the cluster printing (Mastie, fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 14, wherein the step for initiating includes the step for determining whether to perform intelligent routing, and wherein if the intelligent routing is to be performed, utilizing the printing device in performing the intelligent routing (Mastie, fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 15, wherein the step for receiving includes the step for determining whether the first response includes a conflict for despooling the print data to the printing device, and wherein if the conflict is included in the first response, performing the step for resolving the conflict (Mastie, col. 7 L47 to col. 8 L6 and fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 16, a system for determining whether the first response includes an objection to despooling the print data to the printing device, and wherein if the objection is included in the first response, performing the step for resolving the objection (Mastie, col. 7 L47 to col. 8 L6 and fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 17, wherein distributively managing the print job comprises: if no response to the broadcast is received, using the first client computer to manage the print job (Mastie, col. 7 L47 to col. 8 L6 and fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claims 20, a method as recited in claim 12, wherein the print job is a first print job, and wherein said distributively managing the print job further comprises:  
utilizing a second broadcast of an intent to send a second print job to the printing device to determine which of the client computers shall be used to manage the second print job; and ordering the print jobs on a print queue containing information about the first and second print jobs but not the first and second print jobs themselves(Mastie col.7, lines 47-col.8, lines 6, Mochizuki, para.0040-0042.

Therefore it would have been obvious to one ordinary skill in the art to send multiple broadcast intent in order to provide a system to print more than document.

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Mastie and Mochizuki in order to provide a system to print multiple documents.

As per claim 21, the system wherein distributivly managing the print job is enabled by at least one of a print driver; a print assistant and the spooler (Mastie, fig. 1-2c and col. 1 L23 to col. 2 L33, Mochizuki, para 000043). Motivation set forth in claim 12.

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As per claim 24, wherein said sending the first print job from the first client computer to the printing device further includes setting a status of the print job on the print queue(Mastie, Fig.3, col.7, lines 47-60, Mochizuki, para.006-0014).

Motivation set forth in claim 12.

As per claim 25, wherein data said sending the first print job from the first client computer to the printing device further includes removing a remote entry of the first print job from a remote print queue containing a copy of said information about the first and second print jobs but not the first and second print jobs themselves(Mastie, col. 5 L22-67 and fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 26, wherein if the-print data corresponding to the print job is in a printer ready format, the sending the first print job from the first client computer to the printing device further includes using a print processor of the first client computer to send the print data to a port manager of the first client computer device(Mastie, col. 4 L1-21, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 27, wherein if print data corresponding to the print job is in a journaled format, the step for sending the first print job from the first client computer to the printing device further includes: using a print processor of the first client computer to play back the journaled data to a printer driver of the first client computer device; spooling the print data to a spooler of the first client computer; and sending the print data to a port manager of the first client

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computer(Mastie, col. 3 L61 to col. 4 L67, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 29,41,42,43 wherein said distributively managing the print job further comprises: when a response to the broadcast intent is received by the first client computer performing the steps of: determining whether the response includes a conflict from the one or more of the plurality of client computers to print data send the print job to the printing device, wherein if the conflict is included in the response, resolving the conflict(Mastie, col. 7 L47 to col. 8 L6 and fig. 3); and determining whether the response includes an objection from the one or more of the plurality of client computers to send the print job to the printing device, wherein if the objection is included in the response, resolving the objection(Mastie, col. 7 L47 to col. 8 L6 and fig. 3); and if no response to the broadcast intent is received, using the first client computer to manage the print job(Mastie, col. 7 L47 to col. 8 L6 and fig. 3, Mochizuki, para 000043). Motivation set forth in claim 12.

As per claim 33, wherein a broadcast message is used to perform at least one of: registering one of the plurality of client computers for distributed management of print jobs; indicating an intent to despool the print job; setting a status of a despoiled print job; obtaining a status of a despoiled print job; setting a status of the printing device; obtaining a status of the printing device; requesting print queue information; and requesting a print queue change(Mastie, col. 7 L47-60, Mochizuki, para.006-0014). Motivation set forth in claim 12.



As per claim 35, wherein a broadcast is used to indicate an intent to despool the print job(Matie, col.5, lines 45-61, Mochizuki, para.006-0014).

Motivation set forth in claim 12.

As per claim 36, wherein a broadcast is used to set or check a status of a despooled print job(Mastie, col. 7 L47-60, Mochizuki, para.006-0014). Motivation set forth in claim 12.

As per claim 37, wherein a broadcast is used to set or get a status of the printing device(Mastie, col. 7 L47-60, Mochizuki, para.006-0014). Motivation set forth in claim 12.

As per claim 38,47 wherein a broadcast is used to request print queue information(Mastie, Fig.3, col.7, lines 47-60, Mochizuki, para.006-0014). Motivation set forth in claim 12.

As per claim 39,48 wherein a broadcast is used to request a print queue change(Mastie, col. 7 L47-60, Mochizuki, para.006-0014). Motivation set forth in claim 12.

As per claim 44, wherein the local print queue of a managing client computer device contains entries corresponding to, but not containing, print jobs of other client computer devices(Mochizuki, para. 0041-42). Motivation set forth in claim 12.

As per claim 45, wherein the local print queue of the second client computer device includes an entry for a second print job to be printed on the printing device and the second client computer device is configured to manage the printing of the first and second print jobs by: evaluating what type of response

should be sent to the broadcast intent for the first print job; and sending a response to the first client computer device, the response selected from the group of: an indication of no objection when the second print job is of a lower priority than the first print job; an objection and denial when the second print job is of a higher priority than the first print job; an objection and denial when the second print job is currently being sent to the printing device; and an indication of a conflict when the second print job and the first print job have equal priority(Mastie, col. 7 L47 to col. 8 L6 and fig. 3, Mochizuki, para 000043).

Motivation set forth in claim 12.

As per claim 46, wherein the first client computer device is configured to send the first print job to the printing device when no response to the broadcast intent is received, when a response indicating no objection is received, when a response indicating an objection is received and the objection is resolved, and when a response indicating a conflict is received and the conflict is resolved((Mochizuki, para. 0041-42). Motivation set forth in claim 12.

As per claim 49, wherein the system for distributively managing the sending of print jobs further comprises a broadcast message requesting administrative authority(Mochizuki, para. 0041-42). Motivation set forth in claim 12.

Claim 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,498,656 issued to Mastie in view of US Publication 2002/0001495

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issued to Mochizuki in further view of US Patent 5,684,931 issued to Hagar in further view of US Publication 2003/0160993 issued to Kang.

As per claim 34, Mastie in view of Mochizuki in view of Hagar does not disclose the process wherein the broadcast message is used to register a client computer for distributed management of print jobs.

Kang, from the same field of endeavor discloses the process of registering a client computer for distributed management of print jobs (pg. 3 [0034] and fig. 2).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Mastie in view Mochizuki in further view of Hagar in further view of Kang in order to register client computers for distributed management of print jobs.

One of ordinary skilled in the art would have been motivated because it would have enabled management of the print queues (Kang, [0034]).

### ***Response to Arguments***

Applicant's arguments filed 7/21/08 have been fully considered but they are not persuasive. Applicant made arguments, page 16 of the Remarks, pertaining claim 18, which has been cancelled.

The applicant argues in substance,

a) Mastie in view of Mochizuki in further view of Hagar, does not teach, "sending the print job from the first client computer to the printing device only after an event selected from the following events occurs:

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receiving no response to the broadcast intent at the first client computer;  
receiving a response to the broadcast intent at the first client computer  
from at least one of the plurality of the client computers, followed by receiving a  
permission to send the print job to the printing device at the first client computer  
from the at least one of the plurality of client computers.",

b) whether it is obvious to substitute a printer and a computer.

***In reply to a);*** As per claims 12,28,40, recites the limitation,

" sending the print job from the first client computer to the printing device

**only after an event selected from the following events occurs:**

receiving no response to the broadcast intent at the first client computer;  
receiving a response to the broadcast intent at the first client computer  
from at least one of the plurality of the client computers, followed by receiving a  
permission to send the print job to the printing device at the first client computer  
from the at least one of the plurality of client computers".

During patent examination, the pending claims must be "given >their<  
broadest reasonable interpretation consistent with the specification." > In re  
Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Although  
the claims are interpreted in light of the specification, limitations from the  
specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181,  
26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant always has the opportunity to amend the claims during  
prosecution, and broad interpretation by the examiner reduces the possibility that

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the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Only one of the two events is needed to satisfy, "an event selected from the following events", the Office does not give weight to term "selected" because the two events are clearly conditional events. The two events can not coexist, it's either the first client is receiving a response to the broadcast or it does not receive a response to the broadcast. The "selecting" is not used as a verb, in which a user/client chooses one condition over the other.

Mochizuki, para.0043, teaches a host waits for a response from the printers for a certain period of time after sending the printer retrieval packet, to select a printer for printing. Not all printers are going to respond to the printer retrieval packet. Therefore, Mastie in view of Mochizuki teaches, "ending the print job from the first client computer to the printing device only after an event selected from the following events occurs: receiving no response to the broadcast intent at the first client computer".

***In reply to b);*** The Supreme Court stated that the Federal Circuit had erred when it applied the well-known teaching-suggestion-motivation (TSM) test in an overly rigid and formalistic way. Specifically, as the Supreme Court pointed out, the Federal Circuit had erred in four ways:

- (1) "by holding that courts and Patent examiners should look only to the problem the patentee was trying to solve;"
- (2) by assuming "that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem;"
- (3) by concluding "that a patent claim cannot be proved obvious merely by showing that the combination of elements was 'obvious to try;' and

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(4) by overemphasizing "the risk of court and patent examiners falling prey to hindsight bias" and as a result applying "rigid preventative rules that deny fact finders recourse to common sense." KSR, 82 USPQ2d at 1397.

A computer by definition, is a machine that responds to a specific set of instructions and it can execute those instructions. Computers generally consists of memory, a processor, input device, output device, and a display.

Hager, Fig.2, shows a printer with a processor, memory, input device, output device and display. Printers are well known in the art to receive instructions and execute specific instructions. One ordinary skill in the art could use a computer instead of a printer because a printer by definition is the same as a computer.

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/B. T./  
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Examiner, Art Unit 2451  
10/20/08

/John Follansbee/ SPE 2451